

10/552541

JC05 Rec'd PCT/PTO 11 OCT 2005  
CLAIMS

1. A transdermal preparation comprising an ingredient to be absorbed transdermally and a hydroxyapatite.

2. The transdermal preparation of claim 1, wherein the hydroxyapatite has a maximum particle size of 1  $\mu\text{m}$  or less.

3. The transdermal preparation of claim 1, wherein the hydroxyapatite has a maximum particle size of 0.1  $\mu\text{m}$  or less.

4. The transdermal preparation of any one of claims 1 to 3, wherein the hydroxyapatite has a content of 0.1% to 1000% based on a drug to be combined.

5. The transdermal preparation of any one of claims 1 to 4, wherein the ingredient to be absorbed transdermally comprises one or more selected from the group consisting of: an analgesic, antipyretic, and anti-inflammatory agent, antigout or antihyperuricemic agent, nonsteroidal anti-inflammatory agent, steroidal anti-inflammatory agent, anticancer agent, hypnotic or analgesic agent, anxiolytic agent, antipsychotic agent, antidepressant agent, antimanic agent, antihistaminic agent, antiepileptic agent, local anesthetic, antiparkinson agent, muscle relaxant, autonomic or antispasmodic agent, antidiaphoretic agent, cerebral circulation or metabolism-improving drug, cardiac stimulant, antianginal agent, antiarrhythmic agent, antihypertensive agent, vasodilator, decongestant, capillary stabilizer, antihyperlipemic agent, vasopressor, respiratory stimulant, bronchodilator or antiasthmatic agent, antitussive agent, expectorant, therapeutic agent for peptic ulcer, deglutitory agent, antiemetic agent, obstipant or antifatulent, choleric agent, antidiabetic agent, pituitary hormone preparation, adrenocortical hormone preparation, sex hormone preparation, prostaglandin, therapeutic agent for thyroid dysfunction, anti-osteoporosis or bone metabolism improving drug, amino acid, vitamin preparation, antithrombotic agent, antibiotic, sulfa drug, antimycotic agent, antiviral agent, anti-HIV agent, antiparasitic or antiprotozoal agent, antirheumatic drug, immunosuppressant, antiallergic agent, peptide hormone preparation, anti-smoking aid, diet ingredient, polysaccharide, plant extract or essential oil, enzyme, and vaccine.

6. The transdermal preparation of any one of claims 1 to 5, wherein a dosage form of the preparation is a cream, ointment, liquid, tape, patch, or cataplasm.

7. A transmucosal preparation comprising an ingredient to be absorbed transmucosally and a hydroxyapatite.

8. The transmucosal preparation of claim 7, wherein the hydroxyapatite has a maximum particle size of 1  $\mu\text{m}$  or less.

9. The transmucosal preparation of claim 7, wherein the hydroxyapatite has a maximum particle size of 0.1  $\mu\text{m}$  or less.

10. The transmucosal preparation of any one of claims 7 to 9, wherein the hydroxyapatite has a content of 0.1% to 1000% based on a drug to be combined.

11. The transmucosal preparation of any one of claims 7 to 10, wherein the ingredient to be absorbed transmucosally comprises one or more selected from the group consisting of: an analgesic, antipyretic, and anti-inflammatory agent, antigout or antihyperuricemic agent, nonsteroidal anti-inflammatory agent, steroidal anti-inflammatory agent, wound healing agent, anticancer agent, hypnotic or analgesic agent, anxiolytic agent, antipsychotic agent, antidepressant agent, antimanic agent, antihistaminic agent, antiepileptic agent, local anesthetic, antiparkinson agent, muscle relaxant, autonomic or antispasmodic agent, antidiaphoretic agent, cerebral circulation or metabolism-improving drug, cardiac stimulant, antianginal agent, antiarrhythmic agent, antihypertensive agent, vasodilator, decongestant, capillary stabilizer, antihyperlipemic agent, vasopressor, respiratory stimulant, bronchodilator or antiasthmatic agent, antitussive agent, expectorant, therapeutic agent for peptic ulcer, deglutitory agent, antiemetic agent, obstipant or antifatulent, choleric agent, antidiabetic agent, pituitary hormone preparation, adrenocortical hormone preparation, sex hormone preparation, prostaglandin, therapeutic agent for thyroid dysfunction, anti-osteoporosis or bone metabolism improving drug, amino acids vitamin preparation, hemostatic agent, antithrombotic agent, antibiotic, sulfa drug, antimycotic agent, antiviral agents, anti-HIV agents, antiparasitic or antiprotozoal agents, antirheumatic drugs, immunosuppressant, sunscreen agent, antiallergic agent, ophthalmic preparation, antipsoriatic agent, skin softener or emollient, baldness-remedy or hair growth stimulant, peptide hormone preparation, anti-smoking aid, diet ingredient, polysaccharide, plant extract or essential oil, enzyme, and vaccine.

12. The transmucosal preparation of any one of claims 7 to 11, wherein a dosage form of the preparation is a cream, ointment, liquid, tape, patch, cataplasm, suppository, nasal drop, eye drop, vaginal preparation, dentifrice, or chewing gum.